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UNITED STATES DEPARTMENT OF AGRICULTURE
U.S. Agricultural Research Service,
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Forage Crops and Diseases
Section

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3 ESTABLISHMENT AND CARE OF
MEYER ZOYSIA LAWNS*

Meyer zoysia is a single plant selection made at Arlington Farm from a seed introduction of common Zoysia japonica. It is a fine leaf selection that is intermediate in this regard between common Japanese lawngrass (Zoysia japonica) and the related Manila grass (Zoysia matrella). It is a warm-season grass which makes its maximum growth during the hot summer months. It is quite drought tolerant and resistant to disease and insects. Meyer zoysia will withstand considerable wear and resists weed invasion under good management practices. Established turf is quite dense and has a dark green color during the growing season.

Meyer zoysia has the disadvantage of losing its green color with the first killing frost of fall and remaining off-color until the soil begins to warm up in the spring. The period of green color can be extended by generous nitrogen fertilization and close mowing during the active growing season. When actively growing Meyer zoysia is similar in appearance to Kentucky bluegrass.

ADAPTATION--Meyer zoysia is considered to be best adapted in those areas where the ordinary cool-season grasses (bluegrass, fescue, bentgrass) do poorly in the summer. This condition is typical in an area of the United States having Philadelphia, Pennsylvania; Omaha, Nebraska; St. Louis, Missouri; and Richmond, Virginia as its corner points. Although it will grow and survive north of this region its slow growth rate coupled with the shorter growing seasons of the north limits its practical use. South of this recommended area Meyer zoysia will make excellent growth and provide good quality turf, but must compete with finer textured grasses such as Manila grass and improved strains of bermuda grass.

ESTABLISHMENT--Meyer zoysia will produce some seed, but this seed is not available commercially because individual plants produced from seed of Meyer zoysia are highly variable in leaf width, color, vigor and winter hardiness. Therefore, Meyer zoysia must be propagated vegetatively to maintain its desirable characteristics.

A well prepared, weed-free seedbed is desirable when establishing Meyer zoysia. Vegetative material may be planted as plugs or as sprigs. Two-inch plugs planted on one-foot centers will produce a solid turf in approximately three years in the Washington, D. C. area. Sprigs planted in solid rows, one foot between rows, will produce a solid turf in two to three years.

In many cases it may be desirable to introduce Meyer-zoysia into an existing lawn without destroying the vegetation already present. This may be done by planting plugs on one-foot centers. Sprigging into an existing lawn

*Meyer zoysia is a selected strain of common Japanese lawngrass (Zoysia japonica).

2--ESTABLISHMENT AND CARE OF MEYER ZOYSIA LAWNS

is not recommended. Plugs planted into an existing lawn will not spread as quickly as those planted into a newly prepared seedbed because of the increased competition for nutrients and moisture from the vegetation already present. This method, however, has the advantage of having the entire area in some type of vegetation until the Meyer zoysia has formed a uniform cover over the entire area.

FERTILIZATION--At the time of establishment of Meyer zoysia an application of 30 pounds per 1000 square feet of a 5-10-5 or similar fertilizer should be made. During the first year of establishment light applications of a nitrogen fertilizer (ammonium sulfate, ammonium nitrate) or a complete fertilizer should be applied every two to four weeks during the active growing season. After the Meyer zoysia has become well established it should be fertilized spring and fall with 20 pounds of a 10-6-4 or similar fertilizer per 1000 square feet. In addition for good maintenance it would be desirable to apply 25 pounds of an organic nitrogen fertilizer per 1000 square feet during the summer.

LIMING--Unless the soil of your area is extremely acid, 75 pounds of ground limestone per 1000 square feet applied every four to six years will maintain a desirable soil reaction. Ground dolomitic limestone is preferable if available.

IRRIGATION--Meyer zoysia generally will require watering at two to four day intervals until it has become well established. Watering of established Meyer zoysia should be done infrequently, but it is important that sufficient water be applied to wet the soil to a depth of six inches when watering is required. Irrigation water should be applied at a slow rate which does not exceed the infiltration capacity of the soil. Rapid rates of water application will result in surface runoff and loss of water. Shallow, frequent waterings should be avoided as they encourage shallow rooting.

CLIPPING--Meyer zoysia should normally be clipped at 3/4 to 1 inch for lawn use. When a high quality appearing lawn is desired, it may be clipped to 1/2 inch, but it will require more water, more fertilizer and the use of a good quality power mower.



